

## Contributions to the Moss Flora of Japan and Formosa (VIII)

By

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野口 彰: 日臺産蘚類植物考察(其八)

### Mosses from Botel Tobago Island

The mosses of Botel Tobago Island (Kotosyo) lies on the south east of Formosa are little known. Only three species, so far as I am aware, have hitherto been recorded by Dr. Y. HORIKAWA,<sup>1)</sup> viz., *Exodictyon Blumii*, *Mnium formosicum* and *Distichophyllum jungermannioides*. I had an opportunity to examine the mosses of the island collected by Mr. T. KANO in May, 1936. Of these, however, only the species that belong to Isobryales and Hookeriales are listed here.

I wish to express my best thanks to Mr. T. KANO who kindly sent me the materials at my disposal.

#### 66) *Macromitrium* sp.

This species is represented by a sterile poor stem.

#### 67) *Rhacopilum aristatum* MITT., in Journ. of the Linn. Soc. p. 155 (1864).

Distr. Japan prop., Bonins, Luchus, Formosa.

#### 68) *Endotrichella elegans* (DOZ. et MOLK.) FLEISCH.

var. *brevicuspis* NOGUCHI, var. nov. (Fig. 1, 1-4)

Caules secundarii simplices, ad 6 cm longi, siccitate superne curvati, laxiuscule foliosi. Folia caulina oblonga vel ovata, breviter acuminata, longitudinaliter 4-plicata, ad 4 mm longa; marginibus inferne recurvis, e medio ad apicem spinoso-dentatis; nervis binis, brevissimis. Cellulæ folii elongato-rhomboideæ vel ellipticæ, parietibus incrassatis, distincte porosis, mediæ 55-

<sup>1)</sup> Journ. Japan. Bot. XI, p. 503-04 (1935).

75×7-8.5  $\mu$  in diam, apicales breviores, angustiores, basilares lineares vel elongato-rectangulares, parietibus incrassatis, valde porosis.

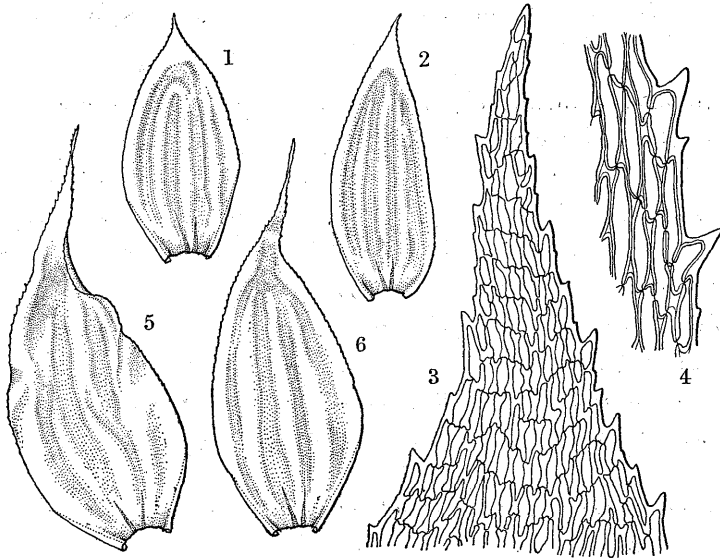


Fig. 1. *Endotrichella elegans* (Doz. et MOLK.) FLEISCH.  
var. *brevicuspis* NOGUCHI, 1-4.

1. Stem-leaf, inferior one, ×8. 2. Ditto, superior one, ×8. 3. Apical part of leaf, ×156. 4. Marginal part of leaf, ×270. 5. Stem-leaf of *E. elegans*, from Luzon, ×8. 6. Ditto, from Malay, ×8.

No. 12828-typus, in Herb. Hiros. Univ.

Distr. Endemic to Botel Tobago.

Remarks. This variety agrees with the typical form of *E. elegans* in the general aspect, but differs from it in the shorter acumen and smaller size of leaves. In the form of leaves, on the other hand, this variety seems to be allied to *E. Poilaneana* THÉR. et P. de la VARDE from Annam, but in the former the leaf-cells are narrower and the marginal teeth of leaf are not so distinctly projected as those of the latter.<sup>2)</sup>

69) **Neckeropsis Lepineana** (MONT.) FLEISCH., Die Musc. d. Fl. v. Buit. III, p. 879, f. 155 (1906-08).

<sup>2)</sup> Die Bull. du Mus. d'Hist. Nat. p. 400, f. II, 1 B (1923).

Syn. *Neckera Lepineana* MONT., in Ann. sc. nat. (1848) p. 107 et Syll. p. 23 : C. MÜLL. Syn. II, p. 49 (1851) ; Bryol. jav. II, p. 61, t. 181 (1863).

Distr. East Indies, Ceylon, Formosa, Luchus, Kyûsyû, Sikoku, Honsyû, &c.

70) **Homaliodendron exigum** (LAC.) FLEISCH., Die Muse. d. Fl. v. Buit. III, p. 897, f. 156 (1906-08).

Syn. *Homalia exigua* v. d. B. et LAC., Bryol. jav. II, p. 55, t. 175 (1863).

*H. laxiretis* SAKURAI, in Bot. Mag. Tokyo, I, p. 618, f. 8 (1935). **syn. nov.**

*Neckeropsis pseudonitidula* OKAMURA, in Journ. Coll. Sc. Imp. Univ. Tokyo, XXXVIII, 4, p. 39, f. 17 (1916). **syn. nov.**

*Homaliodendron pseudonitidulum* (OKAM.) NOGUCHI, in Trans. Nat. Hist. Soc. Formosa, XXIV, p. 291 (1934). **syn. nov.**

Distr. Java, Sumatra, Celebes, Borneo, Siam, Tonkin, Ceylon Assam, Philipp., Formosa, Japan prop. (Kyûsyû, Sikoku).

71) **Homaliodendron microdendron** (MONT.) FLEISCH., in Hedwigia XLV, p. 78 (1906).

Syn. *Hookeria* (?) *microdendron* MONT., in Voy. Bonite, Crypt. p. 150, f. 3 (1846).

*Hypnum microdendron* C. MÜLL., Syn., II, p. 231 (1851).

*Homalia microdendron* (MONT.) JAEG., Ad. II, p. 200 (1874-75).

Distr. Annam, Formosa, Luchus.

72) **Himantocladium loriforme** (LAC.) FLEISCH., Die Muse. d. Fl. v. Buit. III, p. 884 (1906-08) ; OKAM., in Journ. Coll. Sc. Imp. Univ. XXXVIII, 4, p. 37, f. 16 (1916).

Syn. *Neckera loriformis* v. d. B. et LAC., Bryol. jav. II, p. 68, t. 183 (1863).

Distr. Java, Celebes, Ceram, Borneo, Philipp., Formosa, Luchus.

73) **Thamnium incurvum** NOGUCHI, sp. nov. (Fig. 2, 1-7)

Sterile. Caulis primarius elongatus, laxe foliosus, foliis adpressis, in plano triangulatis, ca  $0.7 \times 0.75$  mm; costa brevior, valde tenuis, lævis. Caules secundarii siccitate curvati, breviter stipitati, stipite ca 1 cm longo, remote folioso, dein dense pinnatim ramosi, laxe foliosi, ad ca 5 cm longi; ramis

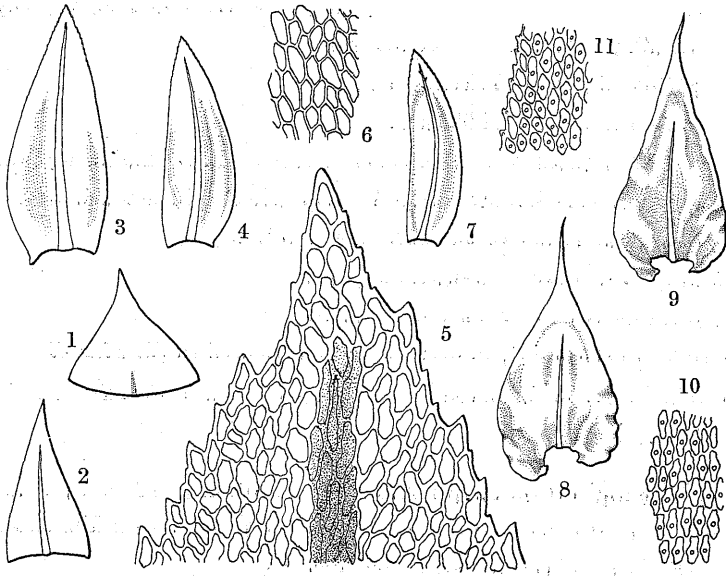


Fig. 2. *Thamnium incurvum* NOGUCHI, 1-7.

*Meteorium papillarioides* NOGUCHI, 8-11.

1. Leaf of primary stem,  $\times 26$ . 2. Leaf of stipes,  $\times 16$ . 3, 4. Leaves of secondary stem,  $\times 12$ . 5. Apical part of stem-leaf,  $\times 270$ . 6. Cells from middle of stem-leaf,  $\times 270$ . 7. Branch-leaf,  $\times 12$ . 8, 9. Stem-leaves,  $\times 16$ . 10. Cells from middle of stem-leaf,  $\times 270$ . 11. Marginal part of stem-leaf,  $\times 270$ .

complanato-patentibus, ca 1-1.5 cm longis, laxe foliosis, obtusis vel attenuatis, simplicibus vel paucissime ramulosis. Folia caulina erecto-patentia, sicca incurva, leviter concava, ad  $2.6 \times 1.2$  mm asymmetrica, ovato-lanceolata vel lanceolata vel triangulato-lanceolata, infra medium latissima, apice distincte acuta; marginibus planis, serrulatis, superne  $\pm$  argute dentatis. Costa valida, basica 0.13 mm crassa, subcontinua, lutescens, dorso laevis. Cellulae folii hexagonae vel irregulariter rectangulares, parietibus tenuibus,  $8.5-15 \mu$ , plerumque  $11 \mu$  longae,  $5.5-9 \mu$ , plerumque  $7.5 \mu$  latae, superiores majores, hexagonae vel rhomboideae vel rectangulares,  $11-15 \times 7-9 \mu$  in diam., basilares elongato-rectangulares vel lineares, parietibus lutescentibus, paulum incrassatis,  $44-50 \times 6-7.5 \mu$  in diam. Folia ramea minora, linearia vel angustissime oblonda,

asymmetrica, carinato-concava, margine plana vel late recurva, superne argute dentata ; costa dorso parce dentata.

No. 12833-typus, in Herb. Hirob. Univ.

Distr. Endemic to Botel Tobago.

Remarks. The present species is characteristic in the following points :

1. Leaves are very loosely setted, less concave and incurved in dry.
2. Branches and apex of stem are incurved in dry.
3. Marginal teeth of stem-leaves are small.
4. Apical parts of leaves are finely acute.

According to the description, this species is related to *Th. Biondii* C. MÜLL. from China in having incurved leaves when dry, but differs from it in the shape of leaves.

74) **Distichophyllum cuspidatum** Doz. et MOLK., in Muse. frond. ined Archip. Ind., p. 101, t. 33 (1844) ; Bryol. jav. II, p. 19 (1861) ; FLEISCH. Die Muse. d. Fl. v. Buit. III, p. 987, f. 169 (1906-08).

Syn. *Mniadelphus cuspidatus* C. MÜLL., Syn. II, p. 261 (1851).

Distr. Ceylon, Java, Sumatra, New Guinea, New Caledonia, Mindanao, &c.

75) **Distichophyllum Mittenii** v.d. B. et LAC., Bryol. jav. II, p. 25, t. 149 (1861) ; FLEISCH. Die Muse. d. Fl. v. Buit. p. 989 (1906-08).

Distr. Ceylon, Java, New Caledonia, Philipp., Formosa.

76) **Hookeria acutifolia** HOOK., in Schwægr. Suppl. II, p. II, I, p. 36, t. 163 (1826) ; C. MÜLL. Syn. II, p. 202 (1851) ; FLEISCH. Die Muse. d. Fl. v. Buit. III, p. 1012, f. 172 (1906-08).

Distr. Nepal, Sikkim, Ceylon, Java, S-Am., Formosa, Luchus.

77) **Callicostella papillata** (MONT.) MITT. f. **longifolia** FLEISCH., Die Muse. d. Fl. v. Buit. III, p. 1026, f. 174, 1-2 (1906-08).

Distr. Java.

78) **Meteorium papillarioides** NOGUCHI, sp. nov. (Fig. 2, 8-11)

Syn. *Papillaria nigrescens* SAKURAI (non JAEGB.), in Bot. Mag. Tokyo, L, p. 618 (1936).

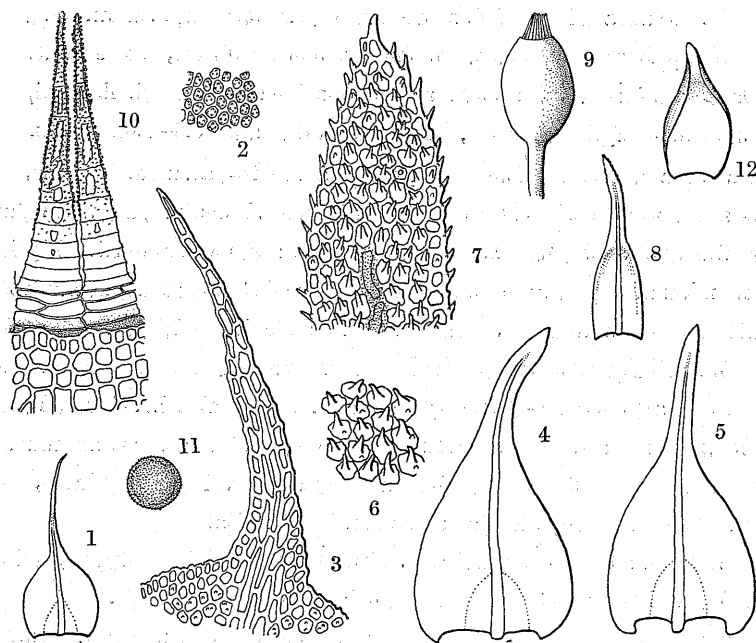
Sterile. Planta minor, rigida, inferne nigrescens, superne lutescentiviridis. Caulis primarius elongatus, flexuosus, dense foliosus, dense ramosus vel vage laxe ramosus. Caules secundarii elongati, ca 5 cm longi, flexuosi, apice attenuati, dense foliosi, teretes, remote ramosi; ramis 0.5–1 cm longis. Folia caulina sicca arctissime imbricata, madida erecto-patentia, late ovata vel ovato-lanceolata, sensim vel subsensim in acumen elongatum, angustum, apice subcapillare producta, basi late cordato-auriculata, leviter concava, biplicata, inferne undulato-plicata, in plano  $1.7\text{--}2.1 \times 0.9\text{--}1.3$  mm; marginibus ubique crenatis, inferne undulatis. Costa tenuis, ultra medium folii producta. Cellulae folii subhyalinae, parietibus potius crassis vel vage incrassatis, mediae rhomboideae, unipapilloae,  $14\text{--}18 \times 5\text{--}6 \mu$  in diam., marginales breviores, breviter rhomboideae, unipapilloae,  $7\text{--}12 \times 4.5\text{--}7 \mu$ , apicales elongato-rectangulares vel lineares, laeves,  $22\text{--}30 \times 3\text{--}3.5 \mu$ , basilares lineares vel rectangulares, laeves, hyalinae,  $25\text{--}40 \times 4.5\text{--}6 \mu$ . Folia ramea caulinis similia.

Loc. Kyûsyû: Ôno, prov. Higo (K. MAEBARA, no. M. 335-typus, in Herb. Hiros. Univ., May 5, 1935 & nos. M. 400, M. 409, Dec. 15, 1935).

Remarks. This species is peculiar in the less concave and gradually narrowed leaves and the areolation of leaves. Mr. K. SAKURAI identifies the present species with *Papillaria nigrescens*, but from a standpoint of unipapillose leaf-cells, it is quite distinct that this species must be placed in *Me-teorium*.

#### 79) *Haplohymenium spinosum* NOGUCHI, sp. nov. (Fig. 3)

Dioicum. Caulis prostratus, flexuosus, ca 4 cm longus, laxe foliosus, dense subpinnatim ramosus; ramis rectis, 5–10 mm longis, simplicibus vel parcissime ramulosis, dense foliosis, obtusis. Folia caulina minuta, uniformia, sicca laxe imbricata, rotundato-ovata, apice elongatum, piliferum, flexuosum saepe recurvum producta, inferne concava,  $0.4\text{--}0.45 \times 0.9\text{--}0.26$  mm; marginibus crenulatis; costa infra apicem folii evanida; cellulis hyalinis, irregulariter hexagonis vel quadratis, parietibus incrassatis, humile papillois, medianis  $5.5\text{--}7.3 \mu$  in diam., superioribus rectangularibus, laevibus, basilaribus rectangularibus, unipapillois vel laevibus,  $9\text{--}12 \times 3\text{--}4 \mu$ . Folia ramea multo majora, uniformia, e basi late cordato-ovata raptim in acumen elongatum lineari-pro-

Fig. 3. *Haplophymenium spinosum* NOGUCHI

1. Stem-leaf,  $\times 48$ . 2. Cells from middle of stem-leaf,  $\times 270$ . 3. Apical part of stem-leaf,  $\times 270$ . 4. Branch-leaf, superior one,  $\times 48$ . 5. Ditto, inferior one,  $\times 48$ . 6. Cells from middle of branch-leaf,  $\times 270$ . 7. Apical part of branch-leaf,  $\times 270$ . 8. Inner perichaetial bract,  $\times 26$ . 9. Capsule,  $\times 16$ . 10. Peristome,  $\times 138$ . 11. Spore,  $\times 270$ . 12. Inner perigonal leaf,  $\times 26$ .

ducta, acuta,  $\pm$  concava, superne  $\pm$  canaliculato-concava,  $0.75-0.95 \times 0.38-0.47$  mm.; marginibus inferne apiloso-superne spinoso-dentatis; costa valida, lutescenti, infra apicem folii producta, dorso alte papillosa; cellulis subhyalinis, rotundato-hexagonis, trigonis  $\pm$  distinctis, medianis  $7.5-13 \mu$  in diam., alte papillosis, superioribus spinoso-papillosis, inferioribus humile multipapillosis,  $7-10 \mu$  in diam., basilaribus internis hyalinis, rectangularibus, laevibus. Bractea perichætii internæ alte varinantes, elongatum, angustum producta, concava, ca  $0.85$  mm longæ, apice  $\pm$  spinoso-dentatæ; paraphysibus numerosis. Seta lævis, ca  $3-3.5$  mm longa,  $0.1$  mm crassa. Theca recta, lævis, ca  $0.7 \times 0.5$  mm. Peristomium simplex, dentes lineari-lanceolati, ca  $0.2$  mm longi, superæ grosse papilloso, perforati. Sporæ  $20-26 \mu$  in diam., minute

papillosæ. Flores masculi gemmiformes; folia perigonia interna late ovata, subacuta, concava, ecostata, ca 0.73 mm longa; paraphysibus numerosis.

Hab. On the bark of trees.

Loc. Kyûsyû: Ins. Yakusima, prov. Ôsumi (T. HASIMOTO, no. 8640-typus; in Herb. Hiros. Univ. July 1933).

Remarks. This species is allied to *H. biforme* but in this species the plant is soft, branches are not attenuated and the shape of leaves is different.

80) **Haplohymenium fasciculare** NOGUCHI, nov. (Fig. 4)

Sterile. Caulis elongatus, flexuosus, ca 5 cm longus, laxe foliosus, dense ramosus vel vage valde laxe ramosus; ramis ca 1 cm longis, flexuosis, dense foliosis, pinnatim ramulosis raro simplicibus. Folia caulina madida laxe imbricata, rotundato-

ovata, apice subulato-producta, concava,  $0.3-0.35 \times 0.2-0.25$  mm; marginibus crenulatis; costa tenui, infra apicem folii producta; cellulis hyalinis, irregulariter rectangularibus, parietibus incrassatis, uni- vel bi-papilosis, medianis  $5-7 \mu$  in diam. Folia ramea polymorpha, e basi late cordato-ovata sensim in acumen lanceo-

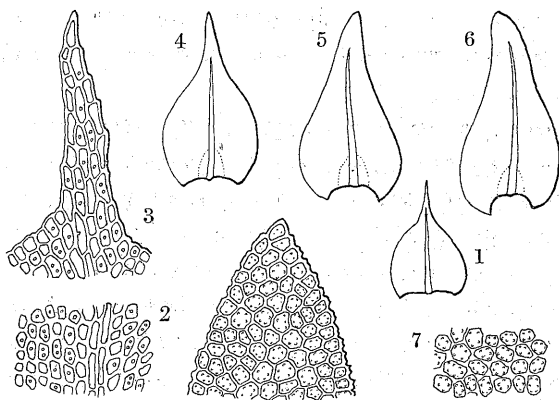


Fig. 4. *Haplohymenium fasciculare* NOGUCHI

1. Stem-leaf,  $\times 48$ . 2. Median region of stem-leaf,  $\times 270$ . 3. Apical part of stem-leaf,  $\times 270$ . 4. Branch-leaf, inferior one,  $\times 48$ . 5, 6. Ditto, superior ones,  $\times 48$ . 7. Cells from middle of branch-leaf,  $\times 270$ . 8. Apical part of branch-leaf,  $\times 270$ .

latum vel ligulatum producta, apice subacuta vel obtusa,  $0.4-0.5 \times 0.25-0.3$  mm; marginibus mamilloso-dentatis; costa elongata, infra apicem folii producta; cellulis subhyalinis, hexagonis, parietibus tenuibus, humile et parce papillois, medianis  $7-9 \mu$  in diam.

Hab. On the bark of trees.



Loc. Sikoku: Mt. Isiduti, prov. Iyo (A. NOGUCHI, no. 1169)-typus, in Herb. Hiros. Univ., Aug. 1935).

Remarks. This species is somewhat related to *H. brachycladum* but can be distinguished from the latter by its pinnate branchlets and smaller leaf-cells.

### 摘 要

生物地理學上異常ノ興味ヲモツテミラレテキル臺東沖ノ紅頭嶼ノ蘚類ニ就テハ從來其ノ調査報告ナク最近ニタダ堀川博士ガ三種ヲ報告サレテキルニスギナイ。筆者ハ幸ニ鹿野忠雄氏ガ昨年五月同島ニ於テ採集サレタ蘚類ヲ同氏ノ好意ニヨツテ檢スルノ機會ニ惠マレタ。堀川博士ノ報告サレタ三種ノ中 *Exodictyon Blumii*, *Mnium formosicum* ノ二種ハ檢出出来タガ *Distichophyllum jungermannioides* ノミハ今回ノ採集品中ニハナカッタ。鹿野氏ノ採集品ノ中、ココニハイぬまごけ類及ビおとめごけ類ニ屬スル種類ノミヲ報告スルニトドメル。何レモ同島ニハ新シク知ラレルモノデアル。之ダケノ資料デ植物地理學上ノ問題ヲ云々スルコトハ不可能デアルカラタダ各種ノ分布區域ヲ附記シテオクニトドメル。

66) 不實ノ古ボケター一本ノ莖ノミノ貧弱ナ材料デアルカラ種名ノ決定ハ差控ヘル。

67) 紅頭嶼ノ *Rhacopilum* ハ東印度諸島方面ノ種類デハナイカト一應疑ツテミタガ精檢ノ結果ハ臺灣本島、九州方面ニハ比較的普通ナほごけデアッタ。

68) 本變種ハ熱帶アジヤニ廣ク分布スル *E. elegans* ヲ少シ許リ少サクシタヤウナ外觀ノモノデ鏡檢スルト葉ハ小サイケレドモ大體ノ特徴ニ於テハ基本種ト餘リ變ツタ事ハナクタバ葉先ガ目立ツテ短イノデソノ新變種ト考ヘ *E. elegans* FLEISCH. var. *brevicuspis* NOGUCHI トシテ發表スル。コノ機會ニ臺灣全島ニアル *E. elegans* ヲズツト調べテミルトフィリピン、東印度方面ノモノトハ葉先其他ニ多少ノ差異ガミラレルヤウデアル。因ニ從來笹岡氏ヤ櫻井氏ハ屋久島ヤ九州本土ニ *E. elegans* ガアルト報告シテキルガ之ハ誤デ、*E. Fauriei* デアル。

69) セイロン、東印度諸島、太平洋諸島等ニ廣ク分布スル *Neckeropsis Lepineana* ハ臺灣本島ニハヨク見受ケ更ニ北上シテ琉球、九州、四國、本州ニ分布シテキル。本州デハ武藏國マデモ及ンデキルガ日本本土デハ石灰岩地方ニ限ラレルヤウデアル。紅頭嶼産ノモノハ多少小形デアル。

70) 筆者ハカツテ *Neckeropsis pseudonitidula* OKAM. ガ *Homaliodendron* ニ屬スルモノデアルトシテ同屬ニ入レ更ニ之ガ *H. exiguum* ト殆ンド區別サレズ或ハ同一種デハナイカトノ疑ヲ抱イテキルコトヲ發表シテオイタガ其後 *H. exiguum* ノ標品ト比較シテ同一種デアルコトヲ知ツタ。又櫻井久一氏ガ發表サレタ *Homalia laxiretis* SAKURAI モ同一種デアル。臺灣本島ニハ普通デアリ南九州ト四國(土佐)トニモ少量採集サレテキ

ル。今回ノ鹿野氏採集品ハ少量デアツタガ紅頭嶼ニモ勿論普通ニアルモノデアラウ。

71) 本種ハ葉ガ極メテ扁平ニ着キ光澤ノ著ルシイ美蘇デ臺灣本島ヤ琉球カラモ知ラレテキタガ紅頭嶼デモ豊富ニ採集サレタ。

72) 紅頭嶼デ採集サレタ本種ハ臺灣本島産等ニミルヤウナ亞莖ノ長クノビタモノデハナイガ主要ナル點ニハ變化ナク同一種デアル。

73) 葉ノ着キ方ガ疎デ、枝、亞莖ノ頂部ハ乾クト曲リ葉ハ乾燥シテモ莖ニ接近セズニ斜出シタママ葉先ノミ内曲シ、葉形ハ同屬ノ他種ニ餘リミナイヤウナ形ヲナシ、且ツ匙狀ニ凹マナイ *Thamnium* 屬ノ一種ガ少量採集サレタガ之ヲ同屬ノ他種ニ比ベルト上記ノ如ク異ツテキル。タダ記載ニヨルト支那産ノ *Th. Biondii* ニ似テキルヤウデアアルガ葉形ヤ其他デ異ツテキル。又臺灣北部方面ニ之ニヤ、似ター一種ガアルガ之トモ異ルヤウデアアルカラ紅頭嶼特産ト考ヘラレル新種デアル。

74) *Distichophyllum cuspidatum* ハ紅頭嶼デハ勿論本邦領内デモ初メテ採集サレタモノデアル。尤モ筆者ハ 1928 年 7 月阿里山ノ沼ノ平附近デ本種ト考ヘラレルモノヲ極ク少量採集シテキタガ其後轉居ニ際シテ該標品ヲ何レカニ紛失シタノデコ、デハ除外シテオイタ。

75) *Distichophyllum Mittenii* ハ本邦領内デハスデニ臺灣本島南部デ採集サレテキタガ餘リ多クナイヤウデアル。紅頭嶼産ノモノハ之トハ少シ異ルヤウデアアルガ少量ノ不實ノ標品デアアルカラ差當リ本種ニアテ置キタイト思フ。

76) 本種ハ臺灣本島ニハ稍々普通ニ見ラレルガ内地産ノ *H. nipponensis* ニ酷似シテキル種類デタダ本種ハ稍々壯大デアリ葉先ガ尖ツテキル點等デ區別サレテキル。然シ兩者ノ間ニハ移リ變リガアリ *acutifolia* ニモ小形ノモノアリ又葉先ガ著ルシク尖ラナイモノモアル。*nipponensis* デモ乾燥シタ場處ニアルモノハ葉ガ疎ニ着キ葉先ガ尖ツテクルヤウデアル。兩者ハ夫々獨立シタ種類ト認ムベキカ否カニ就イテハ將來ノ考究ニ俟ツコトニショウ。

77) 本變種ハ基本種ニ比ベテ稍々小形デアリ葉先ガヨリ明ニ尖ルモノデアル。紅頭嶼以外デハジャバニ知ラレテキルニ過ギナイガ將來モツト分布區域ハ廣クナルダラウ。

78) 1935 年 5 月 5 日及ビ同年 12 月 15 日ニ前原勘次郎氏ガ肥後國ニ於テ採集セシタガリゴケ科ノ一種ヲ櫻井久一氏ハ *Papillaria nigrescens* ト檢定シテ後者ノミヲ日本ニ新シク知ラレシモノトシテ植物學雜誌上ニ發表サレテキル。其等ノ材料ヲミルニ葉形ノミハ同種ニ似テキルガ外觀モ異リ、葉細胞ガ其ノ中央ニ一個宛ノ乳頭ヲ有シテキルコトハ *Papillaria* 屬ノモノデナク *Meteorium* 屬ノモノデアル。之ヲ *Meteorium* 屬ノ他種ニ比ベテミルニ本種ノ葉ハ匙形ニ凹マズ其ノ頂部ハ次第ニ尖リ、葉細胞ハ葉ノ大部分ニ於テ菱形デアリ(多クノ *Meteorium* 屬ノ種類デハ葉細胞ハ線形カ或ハ長ク伸ビタ長方形デ膜ハ薄ク植物體ニ軟イ感ヲ與ヘル) 殊ニ葉緣附近ハ短イ菱形デ細胞膜薄ク從ツテ植物體ハ

剛強ニミエルノデ一見區別出來ルモノデアル。*M. papillarioides* NOGUCHI ト命名スル。

79) 本種ハ *H. biforme* ヤ *H. longinerve* ニ近イモノデアラウガ之等トハ葉形ガ異リ植物體ガ柔軟ニミエ且ツ莖柄ハヨリ長イノデ區別サレル。新シク *H. spinosum* NOGUCHI ト命名スル。

80) 四國ノ石槌山ノ 800 m 位ノ處ノ樹幹ニ *Miyatea fruticella* ト混ツテ生エテキル *Haplohymenium* ノ一種ヲ採集シタガ之ハ同屬ノ他ノモノニ比ベテ枝ガ長クテ密ニ分枝シ、葉細胞ハヨリ透明テ葉形モ異リ、中肋モ長イノデ新種ト考ヘ *H. fasciculare* NOGUCHI トシテ記載スル。

## 北海道産藍藻類 (其三)

廣瀬弘幸

H. HIROSE: Some Cyanophyceean Algæ from Hokkaido (III)

Order Hormogonales 紐子目

Fam. Capsosiraceæ カブソシラ科

*Capsosira* カブソシラ屬

*Capsosira Brebissonii* KÜTZING (第 22 圖)

KÜTZING, Sp. alg. p. 344 (1849); GEITLER in RABENH. Krypt. fl. 14, 3, p. 470, f. 281 (1930); TILDEN, Minn. alg. p. 251, pl. 16, f. 1 (1910).

體ハ小サナ半球狀體ニシテ、多數相集リ、水草ノ莖上等ニ着生シ、疣狀不定ニ擴ガレル平面ノ塊リヲナス。外觀黒綠味アル青色又ハ褐色ヲ呈シ、厚サ  $310\mu$  乃至  $350\mu$  (稀ニ  $140\mu$  乃至  $500\mu$ )、數回繰返シ分枝セル絲狀體ヨリナル。體ノ下部ヲ成ス絲狀體ハ、ソノ着生スル水草體內ニ侵入ス。絲狀體ハ一列ノ細胞列ヨリナリ、稍々叉狀ニ分岐シテ、主軸ヲ存スル事ナシ。鞘ハ厚ク、固ク、透明ニシテ、徑  $6\mu$  乃至  $10\mu$  アリ。細胞ハ扁壓球形、卵形或ハ不規則ナ多角形ヲ呈シ、細胞間ニハ明瞭ナ原形質ノ連絡ヲ認ム。細胞ノ直徑  $2\mu$  乃至  $6\mu$ 。

採集地：霧多布。

Fam. Stigonemataceæ スチゴネマ科

*Stigonema* スチゴネマ屬

*Stigonema minutum* (AGARDH) HASSALLE (第 23 圖)